Material Contingency Rules

- 1 0% on items that have been completed and items planned to begin in FY13. Management Reserve is carried in the Project Office, which will be used as contingency through FY13 if necessary
- 5-15% contingency on: items that have already been purchased within the past year (perhaps in small quantities); items for which there is a recent (within 1 year) catalog price or firm quote based on a nearly completed design and for which there is more than one potential vendor.
- 15-25% contingency on: items that have been purchased at least once within the past two years (perhaps in small quantities); items for which there is a recent catalog price or firm quote based on a nearly completed design but for which there is only one likely vendor; items which are a direct copy of an existing design with no modifications and for which the costs can be documented.
- 25-40% contingency on: items that can be readily estimated from a reasonably detailed but not completed
 design; items adapted from existing designs but with minor modifications, produced within the previous two years, with documented costs. A recent vendor survey based on a preliminary design belongs here.
- 40-60% contingency on: items with a detailed conceptual level of design; items adapted from existing designs
 but with extensive modifications, and/or made more than 2 years previous with documented costs. An estimated based on physicist or engineering experience uses this level.
- 60-80% contingency on items that have unproven fabrication yields or for which there are unique issues (for example: a special-order item; a single preferred vendor).
- 7 80-100% contingency on items that do not yet have a detailed conceptual design.

Labor Contingency Rules

- **o** For Project Management LOE tasks a range between **10% and 20%** should be used.
- 1 0% on items that have been completed and items planned to begin in FY13. Management Reserve is carried in the Project Office, which will be used as contingency through FY13 if necessary
- 10-30% contingency for a very similar task that has been done before and has documented time durations;
 for example, using data from prototyping of an assembly line or fabrication procedure (full or part-scale); for example, documented actual durations for very similar activities performed on recent projects.
 - **25-40%** contingency for a task that is conventional, well defined and tends to be repeatable with good confidence but can expect small fluctuations; for example, testing of production electronics components
- 3 (most boards take the same unit time, a few take longer); for example, fabrication of multiple similar components but which are not an assembly-line process; for example, design labor for conventional items which offer little to no technical risk.
 - 30-50% contingency for a task that is not yet completely defined, but is analogous to past activities; for
- example, a fabrication activity similar to, but not exactly like, items fabricated for other activities; for example, design labor for items similar to, but not exactly like, previous designs.
- **5 50-70%** contingency for a task that is not yet well defined.